Serial No.: 10/591,162 Date Filed: October 3, 2006

Page 2

Please amend claims 1, 2, 8, 9, 16, 17, 22, 44, 46 and 47.

In the claims

1. (currently amended) A compound of formula (1)

$$R_1-A-X-CH_2-R_3-R_4-L_1$$
 (1)

wherein

the group R₁-A is a purine radical of formula (2)

$$R_8$$
 N
 N
 R_7
 N
 R_6
 N

X is oxygen;

R₁ is a group -R₂-L₂ or a group R₅;

 R_2 and R_4 are, independently of each other, a straight or branched chain alkylene group or polyvalent branched chain alkyl group with 1 to 300 carbon atoms, <u>optionally substituted by a lower alkyl, lower alkoxy, lower acyloxy or halogen</u> wherein optionally

- (a) one or more carbon atoms are replaced by oxygen;
- (b) one or more carbon atoms are replaced by nitrogen carrying a hydrogen atom, and the adjacent carbon atom is substituted by oxo;
- (c) one or more carbon atoms are replaced by oxygen, and the adjacent carbon atom is substituted by oxo;

Serial No.: 10/591,162 Date Filed: October 3, 2006

Page 3

- (d) the bond between two adjacent carbon atoms is a double or a triple bond;
- (e) one or more carbon atoms are replaced by a phenylene, a saturated or unsaturated cycloalkylene, a saturated or unsaturated bicycloalkylene, a bridging divalent heteroaromatic or a bridging divalent saturated or unsaturated heterocyclyl group;
- (f) two adjacent carbon atoms are replaced by a disulfide linkage;

or a combination of two or more alkylene and/or modified alkylene groups as defined under (a) to (f) above hereinbefore, optionally containing substituents;

 R_3 is an aromatic or a heteroaromatic group, or an optionally substituted 1-alkenylene, 1-alkynylene, 1-cycloalkenylene, or an unsaturated heterocyclyl group with the double bond connected to CH_2 ;

 R_{S} is an optionally substituted cycloalkyl, cycloalkenyl or heterocyclyl group;

 R_6 is hydrogen, hydroxy or unsubstituted or substituted amino; one of R_7 and \underline{or} R_8 is R_1 and the other one is hydrogen; and

L₁ and L₂ are ene-or-a plurality of the same or different labels and each is selected from the group consisting of a spectroscopic probe fluorophore or a chromophore, a magnetic probe, a contrast reagent, a radioactive moiety, avidin, streptavidin, biotin, a moiety which is capable of crosslinking to other molecules selected from the group consisting of a maleimide, an activated carboxy group active ester, an azide and a benzophenone; a tethered metal-chelate which is capable of generating hydroxyl radicals upon exposure to H₂O₂, and ascorbate, malachite green, a moiety covalently attached to a solid support, a lipid, methotrexate, a linear poly(arginine) of D- and/or L-arginine

Serial No.: 10/591,162 Date Filed: October 3, 2006

Page 4

with 6-15 arginine residues, a linear polymer of 6-15 subunits each carrying a guanidinium group, oligomers or short-length polymers of 6-50 subunits wherein at least one subunit has an attached guanidine group a portion of which have attached guanidinium groups, or a peptide having an RKKRRORRR amino acid sequence (SEQ ID NO:1) and parts of a sequence of HIV-tat protein; or L_1 is a bond connecting R_4 to A forming a cyclic substrate, a further group $-R_3-CH_2-X-A-R_{1,17}$ or a nucleic acid or a derivative thereof capable of undergoing base-pairing with its complementary strand; or L_2 is a nucleic acid or a derivative thereof capable of undergoing base-pairing with its complementary strand if R_7 is hydrogen.

2. (currently amended) The compound according to claim 1, wherein R₃ is phenylene, an unsubstituted or substituted mono- or bicyclic bridging divalent heteroaryl group of 5 or 6 rings atoms comprising zero, one, two, three or four ring nitrogen atoms and zero or one oxygen atom and zero or one sulfur atom, with the proviso that at least one ring carbon atom is replaced by a nitrogen, oxygen or sulfur atom, 1-alkenylene, 1-alkinylene, 1-cyclohexenylene with 3 to 7 carbon atoms, wherein the double or triple bond is connected to CH₂, or an optionally substituted unsaturated bridging divalent heterocyclyl group with 3 to 12 atoms and 1 to 5 heteroatoms selected from the group consisting of nitrogen, oxygen and sulfur, and a double bond in the position connecting the heterocyclyl group to CH₂ ÷ and Rs is optionally substituted cycloalkyl with 3 to 7 carbon atoms; optionally substituted cycloalkenyl with 5 to 7 carbon atoms; or optionally substituted saturated or unsaturated heterocyclyl with 3 to 12 atoms, and 1 to 5 heteroatoms selected from the group consisting of nitrogen, oxygen and sulfur tetrahydrofuranyl optionally substituted by hydroxy or hydroxy-lower alkyl.

Serial No.: 10/591,162 Date Filed: October 3, 2006

Page 5

- 3. (cancelled)
- 4. (previously presented) The compound according to claim 1, wherein R_3 is phenylene.
- 5. (previously presented) The compound according to claim 1, wherein \mathbf{R}_3 is thienylene.
- 6. (previously presented) The compound according to claim 1, wherein R_6 is unsubstituted amino, R_7 is R_1 , and R_8 is hydrogen.
- 7. (previously presented) The compound according to claim 1, wherein R_6 is unsubstituted amino, R_7 is a group $-R_2-L_2$, and R_8 is hydrogen.
- 8. (currently amended) The compound according to claim 7, wherein L₂ is a spectroscopic probe fluorophore or a chromophore.
- 9. (currently amended) The compound according to claim 7, wherein L_1 and L_2 are spectroscopic probes is a fluorophore or a chromophore and L_2 is a fluorophore or a chromophore.
- 10. (currently amended) The compound according to claim 9, wherein each of L_1 and L_2 represents a fluorescence donor $\not=$ or fluorescence quencher pair.
- 11. (currently amended) The compound according to claim 10, wherein L_1 and L_2 represent constitute a FRET pair.

Serial No.: 10/591,162 Date Filed: October 3, 2006

Page 6

12-13. (cancelled)

- 14. (previously presented) The compound according to claim 1, wherein R_6 is unsubstituted amino, R_7 is hydrogen, and R_8 is R_1 .
- 15. (previously presented) The compound according to claim 1, wherein R_6 is unsubstituted amino, R_7 is hydrogen, and R_8 is a group R_2 – L_2 .
- 16. (currently amended) The compound according to claim 15, wherein L₂ is a spectroscopic probe fluorophore or a chromophore.
- (currently amended) The compound according to claim 15 <u>16</u>, wherein L₁ and L₂ are spectroscopic probes is a <u>fluorophore or a</u> chromophore.
- 18. (currently amended) The compound according to claim 17, wherein L_1 and L_2 represent constitute a fluorescence donor/ or a fluorescence quencher pair.
- 19. (currently amended) The compound according to claim 18, wherein L_1 and L_2 represent constitute a donor or an acceptor in a FRET pair.
- 20. (previously presented) The compound according to claim 15, wherein L_2 is avidin, streptavidin or biotin.
- 21. (previously presented) The compound according to claim 15, wherein L_2 is a moiety covalently attached to a solid support.

Serial No.: 10/591,162 Date Filed: October 3, 2006

Page 7

22. (currently amended) The compound according to claim 15, wherein L_2 is a linear poly(arginine) of D- and/or L-arginine with 6-15 arginine residues, an oligomer of 6-50 subunits wherein at least one subunit has an attached quanidine group or a peptide having an RKKRQRRR amino acid sequence (SEQ ID NO:1) a linear polymer of 6-15 subunits each carrying a guanidinium group, oligomers or shortlength polymers of 6-50 subunits, a portion of which have attached quanidinium groups, or parts of a sequence of HIV-tat-protein.

23-43 (cancelled)

- 44. (currently amended) A method for detecting and/or manipulating a protein of interest, wherein the protein of interest is fused to an mutant of a human AGT, the method comprising:
- (a) contacting the AGT fusion protein is contacted with a compound of formula (1) according to claim 1; and,
- (b) detecting the AGT fusion protein is detected and optionally further manipulated using the label L_1 and/or L_2 in a system designed for recognizing and/or handling the label.
- 45. (currently amended) The method according to claim 44, wherein in the compound of formula (1) label L_2 is a solid support, and the AGT fusion protein contacted with the compound of formula (1) is separated from the compound of formula (1) by filtration or centrifugation or separation of magnetic beads.
- 46. (currently amended) The method according to claim 44, wherein in the compound of formula (1) label L_1 is one member and label L_2 the other member of two interacting spectroscopic probes chromophores or fluorophores L_{\pm} , wherein energy can be

Serial No.: 10/591,162 Date Filed: October 3, 2006

Page 8

transferred nonradiatively through dynamic or static quenching, and the AGT fusion protein is detected by fluorescence.

- 47. (currently amended) The method according to claim 44 for detecting and/or manipulating a protein of interest, wherein the protein of interest is fused with a mutant of a human AGT, comprising:
- (a) contacting the mutant of the human AGT fusion protein is contacted with a mixture of
- (ia) a compound of formula (1) wherein R_1 is a group additionally comprises R_5 , wherein R_5 is a substituted or unsubstituted cycloalkyl, cycloalkenyl or heterocyclyl group and which does not react with the mutant AGT; and,
- $(\underline{ii}b)$ another compound of formula (1), which reacts with the mutant AGT fusion protein; and,
- (b) detecting the mutant AGT fusion protein is detected and optionally further manipulated using the label in a system designed for recognizing and/or handling the label.